

Bending moment equals

$$\frac{(500 \times 13.5) \times (13.5 \times 12)}{10} = 109,500 \text{ in. pds.}$$

Therefore, $108 \text{ b. d.}^2 = 109,500$ and $d = 9.2$ ins.

Area of metal required at this point, $9.2 \times 12 \times .008 = .88$ square inches.

amount required to make the beam equally strong in tension and compression. The vertical reinforcement consists of $\frac{1}{2}$ -inch round bars at 12-inch centres.

Bridge Seat.—The buttresses are designed to carry the bridge loads directly to the base, hence the bridge seat has no direct load to carry; but it carries a portion of the overturning moment from the parapet wall and

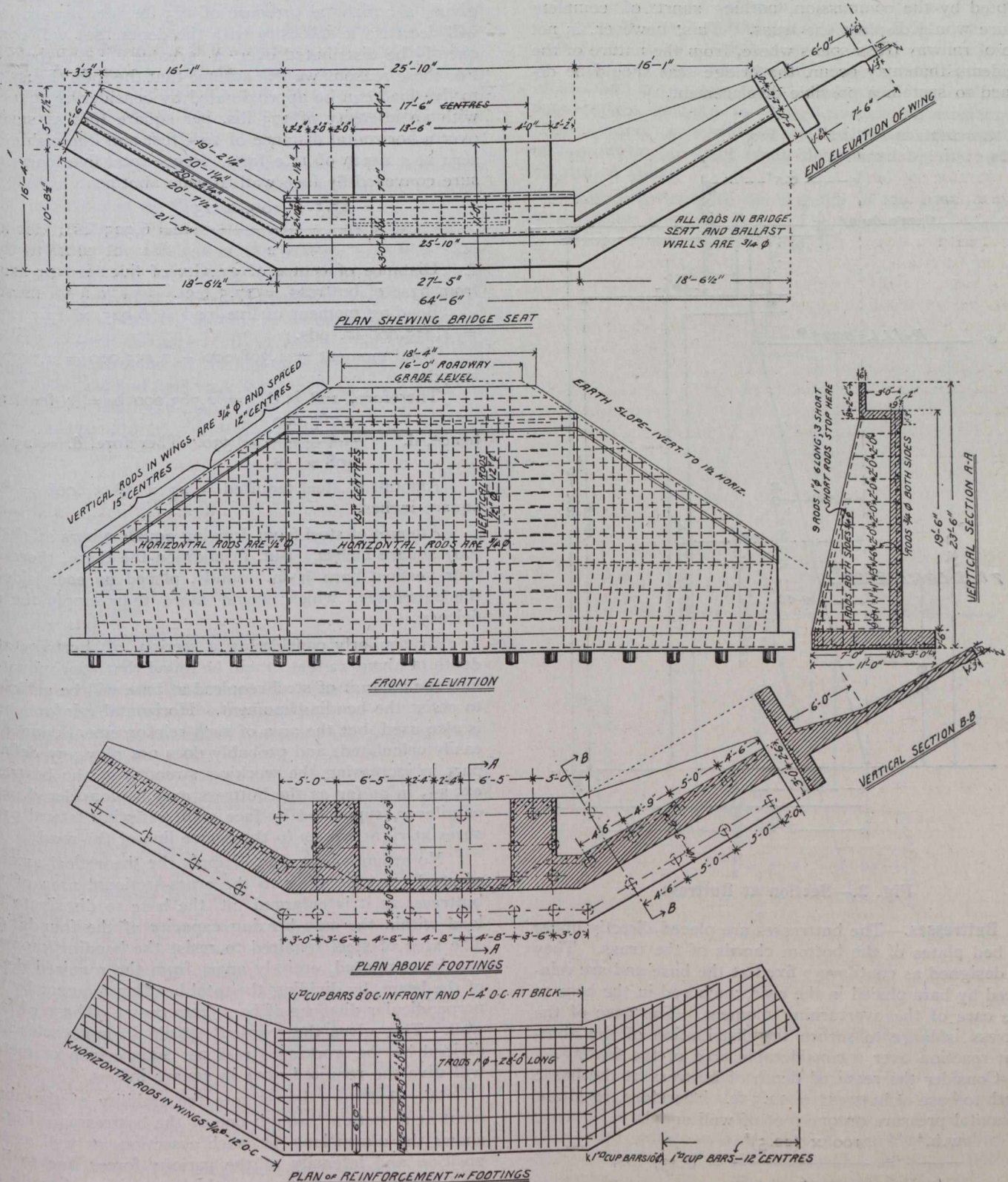


Fig. 1.—Standard Reinforced Concrete Abutment; Board of Highway Commissioners, Saskatchewan.

To ensure against impact and transmitted live load pressures, the face wall is made 9 inches deep at the top, tapering to 12 inches at base. The amount of reinforcement shown in drawing is much less than the theoretical

also acts as a bond between the buttresses, thus adding to the stability of the structure as a whole. The depth of 8 inches employed is amply sufficient for these purposes. The vertical bars in parapet wall are bent and continued